Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

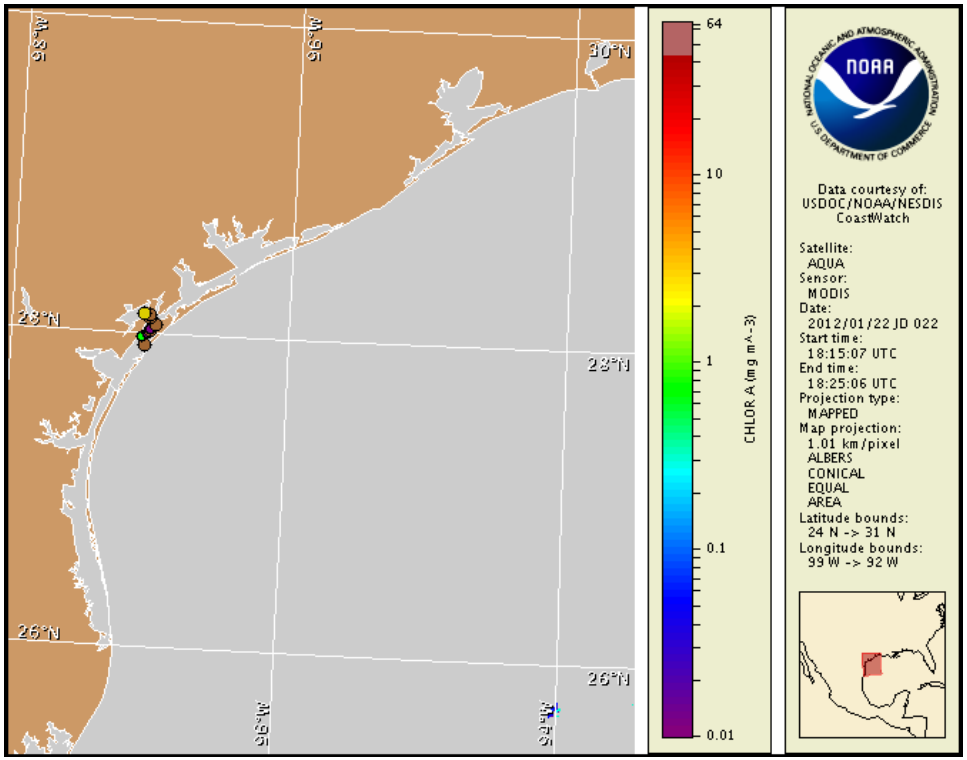
Monday, 23 January 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 19, 2012



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 13 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

A patchy harmful algal bloom is present along the Texas coast. Patchy moderate impacts are possible in the Port Aransas/Corpus Christi Bay area today and tomorrow, with patchy very low impacts possible Wednesday. Water samples last identified harmful algal blooms in the Galveston Bay area on January 11, in the Matagorda Bay area on January 10, and alongshore South Padre Island and within the lower Laguna Madre on January 5. Associated respiratory impacts remain possible in these areas. No additional impacts are expected at the coast in Texas today through Wednesday, January 25. All Texas bays and coastal waters remain closed to commercial and recreational oyster harvesting due to blooms of the harmful algae Karenia brevis (red tide).

Analysis

A harmful algal bloom continues in patches along much of the Texas coastline; however, samples and satellite imagery indicate that *Karenia brevis* concentrations are dissipating in some regions. No reports of respiratory impacts were received from anywhere along the coast last week, but dead fish from previous fish kills might still be present in some of the bays.

No new samples have been received from the Galveston and Matagorda Bay areas. The most recent samples identified 'very low b' to 'low b' *K. brevis* concentrations in the Galveston Bay region (1/11) and 'not present' to 'low b' concentrations in the Matagorda Bay region (1/9-10; TPWD).

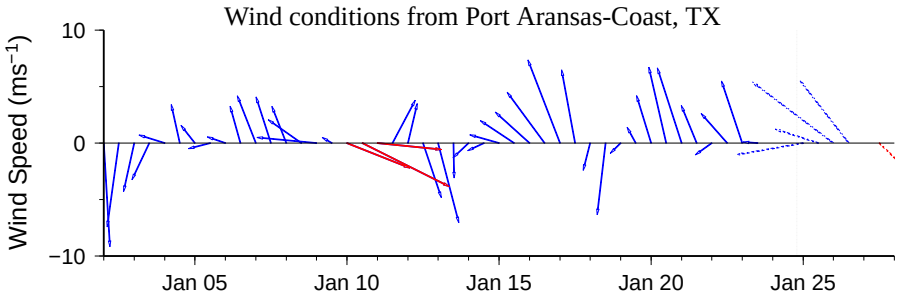
In the Port Aransas/Corpus Christi region, *K. brevis* concentrations have declined to a range between 'not present' and 'low b' (1/17; TPWD). In Copano Bay, samples indicate that *K. brevis* concentrations have decreased from 'medium' to a range between 'low a' and 'low b' (1/17; TPWD). In Aransas Bay, *K. brevis* remained at 'low a' concentrations at ARA 6 offshore Fulton and ARA 13 at Long Reef/St. Jose Island (1/17; TPWD). *K. brevis* concentrations decreased from previously reported 'high' and 'medium' concentrations to: 'low a' at ARA 7 at Long Reef and near the ICCW Marker #40, 'very low a' offshore Key Allegro and at ARA 11 at the ICCW #49, and 'not present' at RDF 12 ICWW at Cove Harbor (1/17; TPWD).

The most recent samples received from the South Padre Island and lower Laguna Madre regions indicated that *K. brevis* is 'not present' (1/11; TPWD).

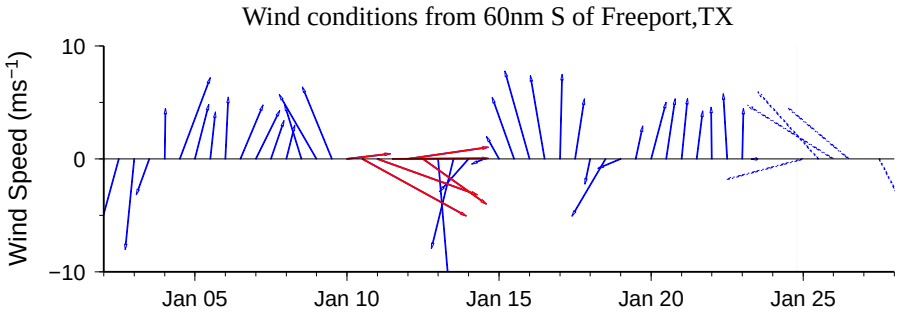
Over the past few days, MODIS imagery (1/22; page 1) has been completely obscured by clouds along the Texas coastline from Sabine Pass to south of the Rio Grande area, limiting analysis.

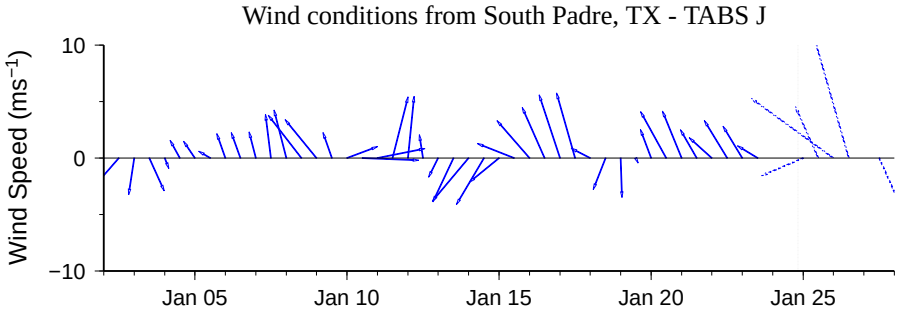
Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 60km south from the Galveston Bay region, 20km south from the Matagorda Peninsula region, 10km south from the Port Aransas region, and 25km north from Brazos Santiago Pass from January 22 to 26. Forecasted onshore winds will increase the potential for impacts along the Texas coast today through Wednesday.

Kavanaugh, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



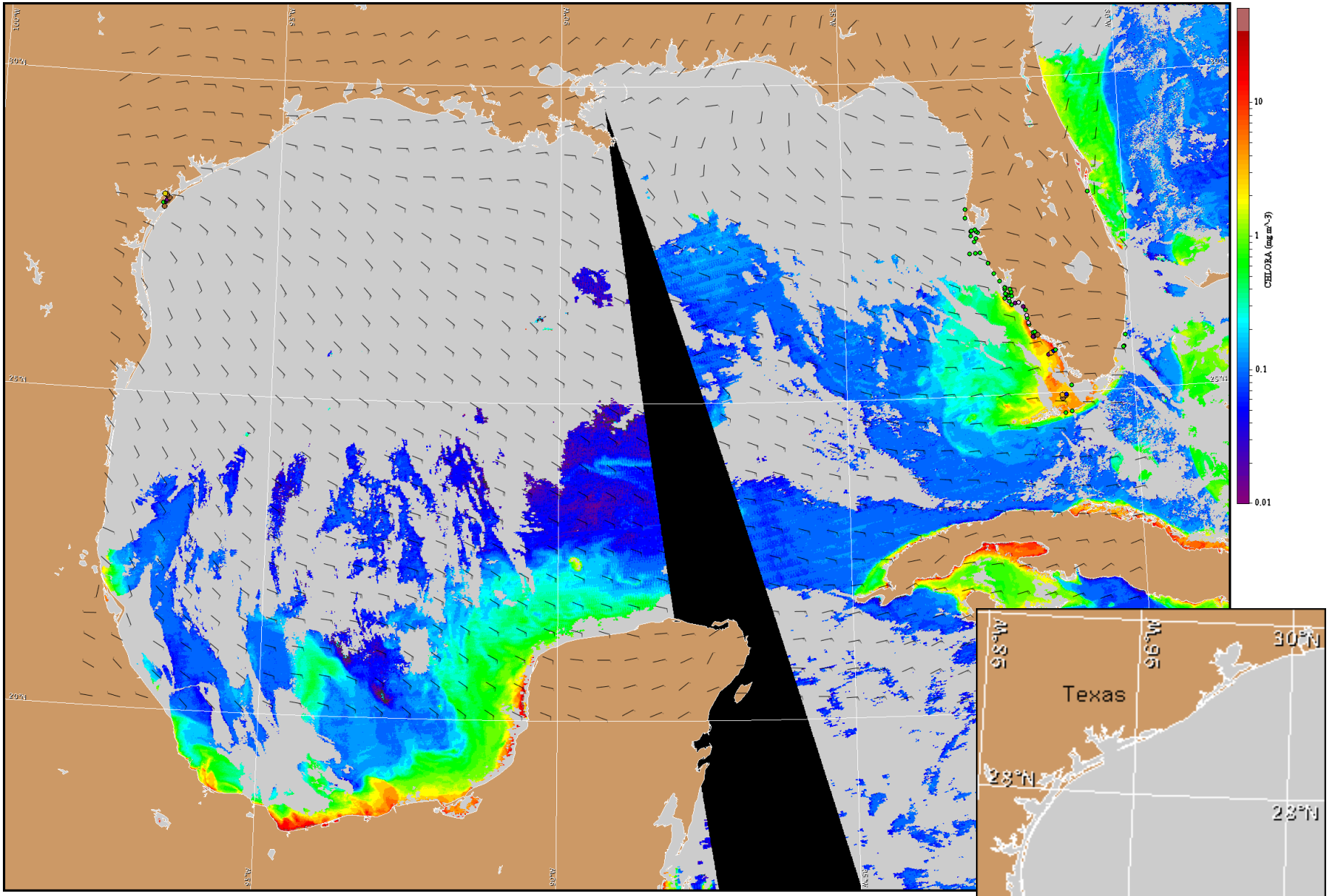


Wind Analysis

Galveston/Freeport: North to northeast winds (10-15 kn, 5-8 m/s) today. East to south-east winds (5-20 kn, 3-10 m/s) tonight through Tuesday. South winds (15-20 kn, 8-10 m/s) Wednesday becoming west winds (10-15 kn) in the evening.

Port Aransas: Northeast to east winds (10-15 kn) today. Southeast winds (10-20 kn, 5-10 m/s) Tuesday. Southwest winds (15-20 kn) Wednesday becoming northwest winds (15-25 kn, 8-13 m/s) in the afternoon through evening.

South Padre: Northeast winds (10 kn, 5 m/s) today. Southeast winds (15-20 kn) tonight through Tuesday night. North winds (20 kn, 10 m/s) Wednesday.



Satellite chlorophyll image and forecast winds for January 24, 2012 12Z with cell concentration sampling data from January 13 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).